



U.S. Army Corps of Engineers  
Environmental Research & Development  
Environmental Laboratory

# Dredged Material Recycled Soil Manufacturing Technology

## Description of Technology

Manufactured top soil has been produced from dredged material, organic waste material, and biosolids (such as Bionsoil™ or N-ViroSoil™) according to a patented formulation.

High quality manufactured soil can be used, unrestrictedly, as topsoil for landscaping, lawns, parks, ballfields, golf courses, highways, street improvement, and bagged soil products.

Lower quality manufactured soil containing some contamination can have restricted use as cover for landfills, brownfields, and Superfund and mining sites.

## Benefits

Dredged material confined disposal facilities (CDFs) can be emptied to provide storage capacity required for future waterway dredging.

Dredged material, waste material, and biosolids (processed animal manure or sewage sludge) will be converted into beneficial, safe products.

## Significant Accomplishments

Dredged material from Toledo Harbor has been tested and field demonstrated as manufactured soil with organic waste and N-ViroSoil™ biosolids.

Commercialization of the process has been proposed to manufacture soil products from up to 800,000 cu yd/year of dredged material from Toledo Harbor CDF Cell 1.

The proposal will provide CDF storage space for at least 10 years of harbor dredging instead of constructing a new CDF; this will result in a substantial cost savings.

The process has been successfully tested and field demonstrated with New York/New Jersey Harbor dredged material plus organic waste and Bionsoil™. This manufactured soil can be used with restrictions as cover for landfills, brownfields, and Superfund and mining sites.

New York/New Jersey Harbor dredged material can be decontaminated using the Bio-Genesis process and then used to manufacture topsoil with organic waste and biosolids (either Bionsoil™ or N-ViroSoil™) and used unrestricted as landscaping topsoil for highways, parks, and golf courses.

## Point of Contact

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